### **Comparisons of Job Characteristics**

Focus Occupation: Environmental Scientists and Specialists, Including Health (19-2041) Associated Occupation: Occupational Health and Safety Specialists (29-9011)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

### Knowledge

Similarity of Focus Occupation to Associated Occupation: 68

Focus Occupation: Environmental Scientists and Specialists, Including Health (19-2041) Associated Occupation: Occupational Health and Safety Specialists (29-9011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation		
Education and Training	9.2	15.3	9.1	<<	Extensive education and/or training may be required	
Public Safety and Security	6.9	15.2	8.9	<<	Extensive education and/or training may be required	
Chemistry	4.8	14.8	14.9	0	Current knowledge level may be sufficient	
Law and Government	5.9	13.2	13.5	0	Current knowledge level may be sufficient	
Engineering and Technology	5.7	12.9	12.1	0	Current knowledge level may be sufficient	
Physics	4.3	11.6	10.5	<	Expanded education and/or training may be required	
Biology	3.7	10.0	14.8	>>	Current knowledge level is likely more than sufficient	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Skills**

Similarity of Focus Occupation to Associated Occupation: 80

Focus Occupation: Environmental Scientists and Specialists, Including Health (19-2041) Associated Occupation: Occupational Health and Safety Specialists (29-9011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Judgment and Decision Making	9.4	12.5	13.1	0	Current skill level may be sufficient
Persuasion	7.4	11.6	10.4	<	A higher skill level may be required
Operation Monitoring	6.6	11.2	7.7	<<	Extensive development of skills in this area may be required
Quality Control Analysis	5.9	11.2	8.9	<	A higher skill level may be required
Systems Analysis	6.5	10.6	10.6	0	Current skill level may be sufficient

Systems Evaluation	6.4	10.6	9.8 0	Current skill level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Abilities**

Similarity of Focus Occupation to Associated Occupation: 93

Focus Occupation: Environmental Scientists and Specialists, Including Health (19-2041) Associated Occupation: Occupational Health and Safety Specialists (29-9011)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Problem Sensitivity	11.1	16.1	15.8	0	Current ability level may be sufficient
Deductive Reasoning	10.6	13.3	15.1	>	Current ability level is likely sufficient
Inductive Reasoning	10.2	13.2	16.5	>>	Current ability level is likely more than sufficient
Speech Clarity	10.2	12.9	12.8	0	Current ability level may be sufficient
Speech Recognition	9.9	12.7	11.4	<	Some improvement in abilities may be required
Flexibility of Closure	7.8	10.8	11.6	0	Current ability level may be sufficient
Far Vision	7.8	10.7	9.7	<	Some improvement in abilities may be required
Perceptual Speed	7.4	10.1	10.1	0	Current ability level may be sufficient
Speed of Closure	5.9	8.2	8.1	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

# **Activities that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 80

Focus Occupation: Environmental Scientists and Specialists, Including Health (19-2041) Associated Occupation: Occupational Health and Safety Specialists (29-9011)

Work Activities	Exclusivity of Activity
Collect samples for testing	58
Communicate technical information	4
Compile numerical or statistical data	38
Confer with engineering, technical or manufacturing personnel	25
Evaluate manufacturing or processing systems	68
Follow safe waste disposal procedures	50
Inspect facilities or equipment for regulatory compliance	51
Perform safety inspections in industrial, manufacturing or repair setting	32
Prepare safety reports	60
Prepare technical reports or related documentation	22
Test air quality, noise, temperature, or radiation	82
Use chemical testing or analysis procedures	54
Use hazardous materials information	35

Use knowledge of investigation techniques	16
Use knowledge of materials testing procedures	70
Use pollution control techniques	62
Use scientific research methodology	21

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## **Tools and Technologies that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 86

Focus Occupation: Environmental Scientists and Specialists, Including Health (19-2041) Associated Occupation: Occupational Health and Safety Specialists (29-9011)

Tools and Technologies	Exclusivity
Chemical evaluation instruments and supplies	10
Chromatographic measuring instruments and accessories	16
Computers	1
Content authoring and editing software	1
Data management and query software	1
Dosimetry equipment	43
Electrochemical measuring instruments and accessories	9
Fluid mechanics equipment	11
Gas analyzers and monitors	10
Humidity and moisture measuring instruments	15
Indicating and recording instruments	2
Industry specific software	1
Light and wave generating and measuring equipment	4
Liquid and gas flow measuring and observing instruments	15
Manual test kits and quality controls and calibrators and standards	33
Meteorological instruments	16
Network applications software	1
Non destructive examination equipment	13
Sampling equipment	12
Soil measuring equipment	20
Spectroscopic equipment	10
Water treatment and supply equipment	21

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.